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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,965	09/05/2003	Hisashi Ohtsuki	Q77309	5668

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EXAMINER	
JULES, FRANTZ F	

ART UNIT	PAPER NUMBER
3617	

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/654,965	OHTSUKI, HISASHI	
	Examiner	Art Unit	
	Frantz F. Jules	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because:

Fig. 5 which illustrates a conventional wheel support should be labeled "Prior Art".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> **(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.**

3. Claims 1-3 are rejected under 35 U.S.C. 102(e)(1) as being anticipated by Silvasi (US 6,626,579).

Claims 1-3

Silvasi discloses a wheel support bearing for rotatably supporting a wheel relative to a vehicle body structure, the wheel support bearing assembly comprising an outer member (14) having an outer peripheral surface formed with a vehicle body fitting flange for securement of the wheel support bearing assembly to a knuckle (16) made of an aluminum alloy, the outer member also having an inner peripheral surface formed with

raceways; an inner member (12) having a wheel mounting flange (12B) formed at one end thereof and also having raceways defined therein in alignment with the raceways in the outer member; rows of rolling elements as shown in fig. 3 positioned between the raceways in the outer member and the raceways in the inner member, respectively; and an electrically insulating layer (20A, 52B) provided at a surface area of contact between the outer member and the knuckle.

The electrically insulating layer is provided on a portion of an outer peripheral surface of the outer member, that is received in the knuckle, and one of axial end faces of the vehicle body mounting flange confronting the knuckle.

The electrically insulating layer comprises a plated ply and a coating ply formed on the plated ply, or solely a coating ply.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silvasi, as applied to claim 1 and in view of Kenji (JP 2001221243A).

Claim 4

Silvasi teaches all the limitations of claim 4 except for an electroconductive seal positioned in the annular working space between the inner and the outer member. The geneneral concept of providing an electroconductive seal in the annular space between

the inner and outer member of a wheel support bearing assembly is well known in the art as illustrated by Kenji which discloses the use of an electroconductive seal positioned in the annular working space between the inner and the outer member of the wheel support assembly, see abstract section. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Silvasi to include the use of an electroconductive seal positioned in the annular working space between the inner and the outer member in his advantageous wheel support bearing assembly as taught by Kenji in order to protect the bearing against dirt or contamination.

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silvasi and Kenji as applied to claim 4 above, and further in view of The Prior Art drawing (Fig. 5).

Claims 5-6

Silvasi and Kenji teach all the limitations of claims 5-6 except for a wheel support bearing comprising an electroconductive core metal or slinger mounted on the seals with a lip region that is held in sliding contact with the electroconductive slinger. The general concept of providing an electroconductive core metal or slinger mounted on the seals with a lip region that is held in sliding contact with the electroconductive slinger in a wheel bearing support is well known in the art as illustrated by the Prior Art Fig. Which discloses an electroconductive core metal or slinger mounted on the seals (37, 38) with a lip region that is held in sliding contact with the electroconductive slinger. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Silvasi to include the use of an electroconductive core metal or slinger mounted on the

seals with a lip region that is held in sliding contact with the electroconductive slinger as taught by The Prior Art Fig. 5 in order to increase the strength of the sealing members thereby preventing early failure of the seals.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure;

Hoffmann et al and Weir, and Torii et al are cited to show related wheel support bearing assembly comprising knuckle made of aluminum.

Masaki discloses a method of providing an insulation gasket to prevent corrosion between the metal.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules
Examiner
Art Unit 3617

FFJ

March 17, 2004

FRANTZ F. JULES
PATENT EXAMINER